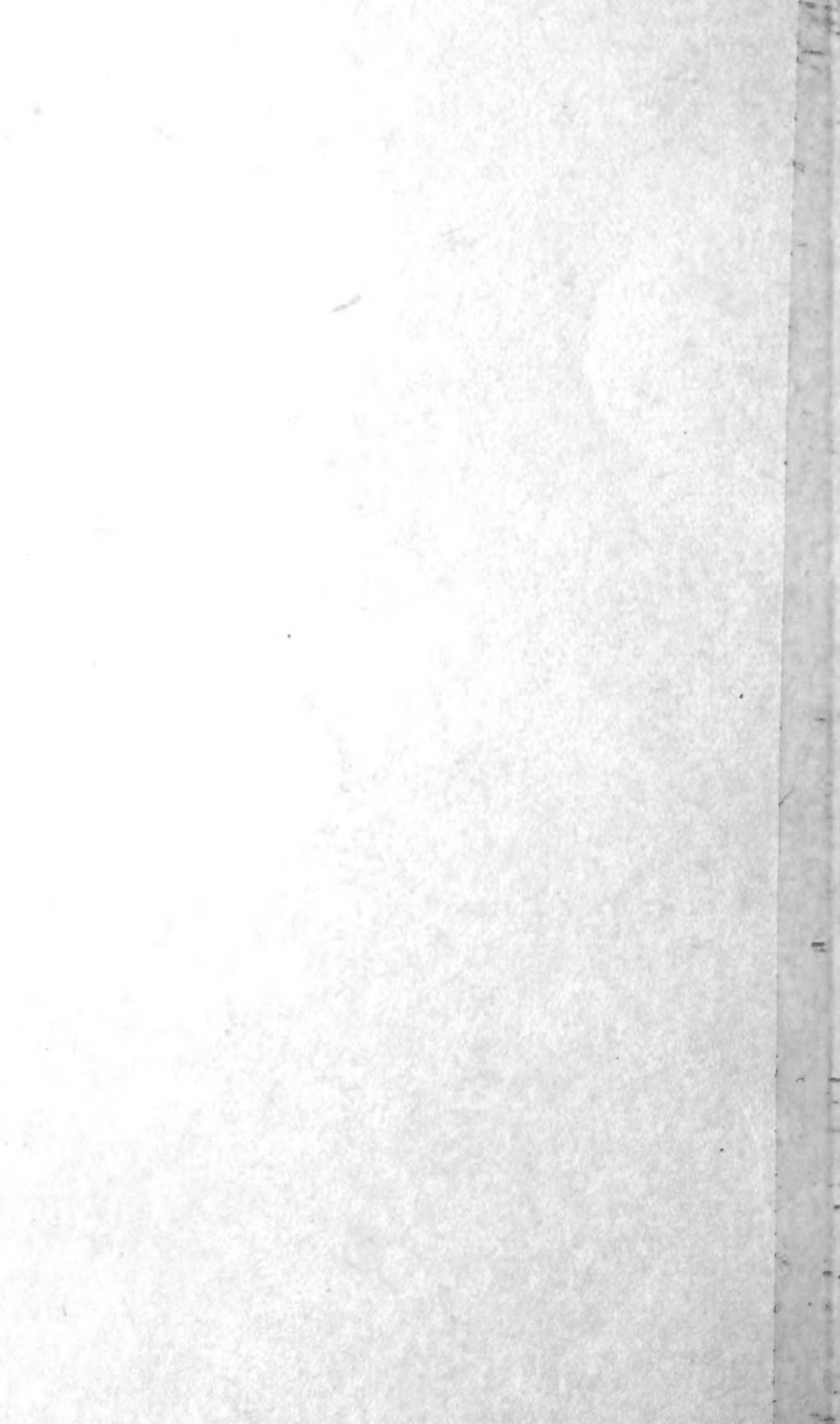


Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices



1883

ESTABLISHED

1883

CATALOGUE

RECEIVED
OF
MAY 5 1910

Bates' Experimental

AND

Botanical Grounds

JACKSON, S. C.

SPECIALTIES:

Bates' varieties of Cotton Seed Grafting
Wood from my new Hybrid Japan
Plumb Seedlings

Grafting Wood from my new Hybrid
Orental and European Pear Seedlings

Grafting Wood from my new Hybrid
Peach and Apple Tree Seedlings

GARDEN HERBS

for Seasoning Dishes, Meats, &c.

Grafted and Budded Mammoth Paper
Shell Pecan Trees, &c.

1883—1911

BATES' EXPERIMENTAL
AND
BOTANICAL GROUNDS

SPECIALTIES:

The breeding of Fancy Varieties of Cotton Seed,
Choice Seedling Fruit Trees, and the growing
of Medicinal Plants, Herbs, &c., for the
manufacture of Teas, Tinctures,
Perfumery, Salves, &c.

Established 1883

R. BATES
JACKSON, AIKEN COUNTY
SOUTH CAROLINA
U. S. A.



R. BATES,
Founder.

INTRODUCTORY

I come by the business I am in by instinct, I love it, amounting to idolatry, for its pursuit; in 1883 I started the improving of cotton seed and in 1893 I started the origination of fancy seedling fruit trees, berry plants, etc., upon my home tract I operate my farm and experiments, own and operate my own ginnery, being driven by an 18-horse power gasoline engine, which obviates danger of too much moisture in the seed, due to use of steam. I always have a close eye to keep my cotton seed sound and dry, everything I offer to you in this catalogue has been thoroughly tested and is in every way a high standard product, my cotton varieties are heavy producers.

My seedlings, Plums, Peaches and Pears produce very large, delicious fruit, free from rot.

My grafting and budded Pecan Trees are grafted and budded with graft and bud wood from the original mother trees, hence my trees are true to name. I have the trees in bearing, I know them to bear the true nut, it is well for every home to have a few nice fruit and nut bearing trees growing around, it brings about health and satisfaction to the children, wife and even the old gentleman.

Trusting this will meet your approval and at the same time thanking my patrons and friends for their many past favors and confidence and hope still further for a more liberal recompense.

PLANT BREEDING

I would like to write you an article on the subject, giving you some ideas as to the various experiments I have made in working the Pollen along with high powered Botanical observatory glasses; such as medicating the Pollen to make Hybrids in the genera of ill assorted plants that are allied to each other (to illustrate):

Take the chemical medications of certain wild flowers and place upon the proper spot in the blooms for absorption in the coloring cells thereby changing the flower and color of the fruit in the new seedling. While science teaches that hybrids cannot be produced from Pears and Apples and from Plums and Peaches, Pears and Haws, Pears and Quinces. Cherries and Peaches, Cherries and Plums, while Mr. L. Burbank has been able to get a hybrid of the Plum and Apricot. My experience proves that flavors can be blended between them and by working along this line it is evident that unfixed fruitless hybrids can be established at first and perseverance I believe fruiting hybrids can be had, the same partly holds good in cotton plants for certain Herogenous fix types, the Pollen of the blooms can be placed upon each other, thereby making each plant a sterile Pollen, causing both parent stalks to lose their forms, but many times you can take triples, quads, hectangles, &c., &c., and make very interesting hybrids as to sports to plant off in isolated places year after year until you establish certain fixed types to keep up any one particular variety in a compatible combination.

Space and time will not allow me to write lengthy on the subject. I will refer you to the Botanist of the different State Experimental Stations, Prof. L. H. Bailey, in Cornell University, N. Y., is a good subject.

If particularly interested you should belong to the American Breeders Association, then you can get the benefit of the latest experiments on the subject.

Many times new and valuable plants can be produced by only a few minutes of scientific and experimental work when otherwise left to natural conditions these new seedlings would never appear.

I took up the breeding of cotton seed in 1883 and have been at it ever since, and in 1893 I began the breeding of Horticultural Stock, &c. I have produced stalks of cotton that grew on them 150 to 882 well developed open bolls of white cotton per stalk, the same being placed on exhibition by me at the Fairs and Exhibitions.

A stalk at our fair at Columbia, S. C., had on it 417 bolls. A stalk at the Augusta, Ga., Exposition in 1891 contained 882 well developed open bolls. Atlanta Exposition, 1893. Coyacan Mexico, Exposition in 1896. World's Fair Chicago, 1893. Paris Exposition, (Paris, France,) 1900; receiving the highest award for the prolificness of the stalks &c., Whenever I pretend to make a pass to exhibit stalks at the fairs and exhibitions I always carry off the Blue Ribbons. My different varieties of cotton are now being grown in every cotton growing country in the world. My Victor Cotton is the most popular variety I have ever introduced.

I do not farm out seed nor run a public ginnery, only gin my own varieties with the utmost care which are of my own production, therefore my stock is limited.

BATES' VICTOR COTTON

The plants are of uniform and spreading growth, the limbs grow close together up and down on main stalk and are duplicated; the bolls are set close together on the numerous quantity of limbs. the bolls are nearly round, of medium size, open wide; picks easily and clean of trash, staple short and coarse, sitting in a stiff wide fluffy clump in the burrs, not subject to be blown out by rain and wind, the seed is very small, registers 8,976

seed per pound, and are of a dusty brownish-green color, turning 40 to 44 per cent. lint; the seed I offer is a very early strain.

Price.....\$2.50 per bushel.

"BATES' GREY HOUND COTTON."

The plants are symetrical and uniform, of spreading growth, the limbs are numerous all the way around from the ground to the top of the stalk and are duplicated, setting not over an inch apart, up and down on main stalk, the plants are very prolific; bolls set close together on the limbs; on many stalks the bolls are duplicated on the joints along the limbs; the plants are of a hard wood like nature. Perfect maturity of the bolls cause it to have less stain and more lint in it than any other early varieties that are subject to premature decay, causing early opening, this is the earliest known variety of which I have any knowledge and is not early from premature decay like other earlies, the bolls are round, of medium size, seed very small, 9.020 per pound, are fuzzy of a dusty brownish-green color; staple coarse, the bolls open wide, the locks sitting up in a stiff, fluffy clump in the burrs; not subject to fall-out on the ground; picks easily and clean of trash; turning out 40 to 44 per cent. of lint. I made at the rate of two 450-pound bales per acre from this cotton, planted on the 1st day of June, last year, 1910. Knowing the demand has been rapidly increasing for a very early variety of heavy production, which has induced me with this end in view, in the origination and propagation of this variety, like all the other of my varieties, it was not hurriedly gotten up, the plants come true from the seed and the plants produce true seed—in other words it is a very typical cotton for the general farming public.

Price of Seed.....\$2.50 per bushel.

BATES' BIG BOLL COTTON

Plants are vigorous, very prolific and hardy; bolls very large, opens very wide, making a big show, to please the eye; running 45 to 50 to the pound of seed cotton; staple long, coarse, curley and fluffy, the bolls do not make their show in size before they open like other big bolls sorts, but make their show after they open. It is of early maturity and grows late, producing a top crop; seed of medium size of a dusty whitish-green color, occasionally a big black seed will appear as this hybrid is in it about 2 per cent.; is picks easily and extremely clean of trash, the staple is of a rich beautiful cream color, so much admired by cotton buyers, turning out 42 per cent. lint from seed cotton, occasionally I find a few stalks to turn out as high as 45 to 48 per cent. lint from actual register by diminutive scales, this is my same old time Big Boll greatly improved.

In Bulletin No. 20, Feb., 1893, of the Georgia Experimental Station, you will see Col. R. J. Reddings variety test of cotton experiment No. 8, where he, the director, states as follows: "Varieties, 1st, Bates' Big Boll is a new variety to this station and very promising, giving the largest yield of the 25 varieties, both in seed cotton and percentage of lint; it has rather large bolls, a symmetrical stalk and fair staple."

If nothing prevents I will offer the seed of this variety for sale in 1912 in very limited quantities, only 100 seed will be sold to each applicant while stock last, only the best strain of registered seed will be supplied.

Price will be.....\$1.00 per 100 seed.

MONCELT PLUM

It is a seedling of Red Nagate, crossed with Clyman, fruit very large, heart shape; purple, size, 6 inches in circumference. Seed very small, flesh

very firm and delicious, having a combined flavor of the Pineapple, Peach, Plum and Apricot; will keep longer than any other Plum, hence the best shipper; will dry more prunes than any other, the tree is hardy, of upright spreading growth, with dark green beautiful shiny foliage. Tree more regular to bear than other Plums, fruit spurs prominent and bloom out late in the spring, bloom stems short and stiff, fruits stick in clusters; very prolific all over the tree. This is the best seedling of over 17,000 Red Nagate seedlings tested by me, season of ripening tenth to last of June; it is rot proof and very nearly curculio proof.

Price of graft and bud wood by mail or express \$2.00 per foot. Young trees grafted or budded on hardy Chickasaw Plum Seedling stocks, Price \$1.00 each.

BATES' PLUM.

It is a cross of Burbank and Crimson Beauty and is rot proof and nearly curculio proof; size very large, 2 inches in diameter, nearly round, color dark reddish purple. Tree is of vigorous spreading growth; foliage very large and shiny, making a very ornamental tree; it is a seedling of the Burbank Plum and is the best of a few thousand Burbank Plum seedlings tested by me; blooms late, bears often, stocky bloom stems, graft and bud wood \$2.00 per foot: young trees grafted upon hardy Chickasaw seedling stocks, \$1.00 each. Season June 15th.

LADIES FAVORITE PLUM

A cross of our yellow wild goose and the Kelsey, a seedling of Kelsey, fruit of large size, $2\frac{1}{2}$ inches in diameter, nearly round, shell pink next to the sun, flesh yellow, very soft and juicy, of a rich banana sweet and brisk sub-acid flavors combined, something unusual to Plums; a general Ladies' Favorite, it is not a shipping plum, but one

to eat from the tree. Tree is hardy, but a slight shy bearer here, but further south it should be a better bearer; it blooms with its parent, the bloom stems are long and slender. Grafting and bud wood, \$2.00 per foot. Young trees grafted on hardy Chickasaw stocks, \$1.00 each.

SHERBERT PLUM.

It is a cross of Mariana and Wickson; a seedling of Wickson; tree is hardy and grows from cuttings readily as Mariana, the foliage and bark character more largely resemble the Wickson; the tree is very prolific, fruit is of a beautiful dark purple red color, heart shape; size $\frac{1}{2}$ to 2 inches in diameter; season June 20th; flavor a pronounced very clear strawberry, acid, making a very delicious sherbert; like its parent the fruit is subject to rot in wet or extremely hot weather.

Propagating wood \$200 per foot. Young trees \$1.00 each.

BATES' GRAFTING STOCK.

This is a new very dwarf, hardy, long lived, thornless and fruitless grafting stock that grows readily from cuttings, original tree 17 years old, has never bloomed, but bloom spurs are apparent on the tree; original tree not over 4 feet high with a dense compact round head, this makes and ideal stock to graft dwarf Peaches and Plums upon, and root graft large growing Peaches on, to produce natural trees just set the grafts deep and the Peach will soon strike roots above this stock, then the trees can be taken up and cut off the dwarf stock and set the natural peach tree wherever you may; in this way you get long lived peach trees: this is the best stock to graft all European Plums on to remain. Propagating wood \$2.00 per foot.

BATES PEAR

It is a cross of the Seckle and Japan Golden Russet, a seedling of Japan Golden Russet, fruit is bell or pear shape, greenish-yellow color when ripe, flesh white and mealv. or better quality than Kiefer, so says Prof. G. B. Bracket in Pomology of the U. S. Department of Agriculture. Washington, D. C.. Judging from sample specimens I mailed him for examination.

The tree is prolific and hardy, of upright spreading growth, fruit run in size 10 to 15 ounces, season of ripening all of September, this is the best one of a number of Japan Golden Russet seedlings tested by me. Grafting wood, \$2.00 per foot. Young trees grafted on Quince or Pear Seedlings, \$1.00 each.

BLACK TWIGG PEAR.

It is a cross of Kiefer and Lincoln Coreless winter, a seedling of Kiefer; tree hardy, of beautiful stocky, compact, spreading growth, of thornless character, foilage large, dark green and shiny, very ornamental twigs, very dark apple twig color and unusual freak in nature, fruit not so large as Kiefer, nearly in same shape, of a dingy brown color when ripe, of better quality so says Prof. G. B. Bracket, in Pomology, at Washington, D. C. Season later than Kiefer, flesh firm, can be kept a long time in winter peaked up in dry sand in barrels, tree regular bearer and prolific. Grafting wood, \$2.00 per foot. Young trees worked on Pear or Quince stock, \$1.00 each.

ORLEANS PEAR.

It is a second generation seedling from the Duchess De Angouleme; a seedling of Bill Campbell and Alabama seedling, it is a very large, late, firm juicy, delicious Pear with pronounced apple flavor,

and produced last season many specimens which weighed one pound, one and a half ounces. Fruit Pear shape, of a light yellowish-green color when ripe, with usually some red tints on the sunny side; the tree bore so heavily last year that the limbs broke and split very badly, owing to my not pruning the tree. Original tree is 11 years old, very hardy and free from disease.

Graft and bud wood, \$2.00 per foot. Young trees grafted on Quince stock, \$1.00 each.

SPANISH WATERMELON

It is a very large, nearly round melon with yellow seed, fine eaters and shipper; keeps longer than other sorts and stands handling better.

Seed per packet, 10 cents.

GRAFTED AND BUDDED MAMMOTH PAPER SHELL PECAN TREES.

Of the best and most prolific, early bearing varieties, namely as follows: Stuart, Mobile, Schley, Panyagie, Frotcher; each of these produce nuts that run 40 to 55 to the pound, for large specimens except Schley, which is a size smaller. Height above the ground:

18 inches.....	\$.50
36 inches.....	.60
40 inches.....	.70
48 inches.....	.85
60 inches.....	1.25
72 inches.....	1.50
84 inches.....	2.00
96 inches.....	2.50

Yard specimens with trunks the size of a shovel handle and upwards, well branched, \$5.00 each.

Trees will be dug up with a good system of roots on them to insure them a good send off.

P. S.—the Panagarie Pecan tree is my own production, it is an early bearer of very large thin shell, nuts of high quality; graft wood \$2.00 per

foot. Rockville Hican on Pecan or Hickory stocks, 50c to \$2.50 each, according to size; this tree is a rare freak in nature, very ornamental and produce delicious thin shell nuts having but one division; a native of Southeast Missouri—nothing else like it to be found.

HOME MADE BLACKBERRY.

This one I produced, it is the best from over 27,000 seedlings, planted from seed of the best wild blackberries.

Plants are very large, vigorous and prolific, fruit very large and delicious, free from that bitterness so commonly found in most blackberries.

Plants 25 cents each, or \$8.00 per 100 plants.

FERTILIZER MIXTURE FOR COTTON

3 tons Basic Slag.
1 ton Cotton Seed Meal.
1 ton Bone Meal.
1 ton Nitrate of Soda.
1 ton Muriate of Potash.

Mix and use 400 pounds per acre under the bed when you plant, then side dress about July 1st, 400 more pounds per acre, again top dress about 200 pounds per acre in the middle of the row ahead of sweeps in every other middle, about July 25th, then again repeat the dose in the other untop dressed middle about August 15th or 20th.

This same mixture is O K. for fruit trees and nearly any other plant.

IMPROVED WHITE CAROLINA GOPHA RICE

Grains thick and broad, of medium length, plants sure headers, easily hulled with but little breakage, which I bred with this end in view, as well as other good points. I own and operate an Engelberg

Rice Huller, which has given me the proper knowledge as constituting the hulling principles with the different rices in points as regarding the adaptability in hulling through cylinder hullers. Price \$2.00 per peck.

BEARDED GUINEA RICE

This is an early dwarf growing, prolific, bearded sort of red rice, but when hulled by machinery the polisher scours it white, it is easily hulled without breakage. Price \$2.00 per peck.

Owing to limited means I have so far been unable to send out annual catalogues, though I make an apology to my patrons and friends that have been so anxiously awaiting to receive my prints.

I beg to remain, your respectfully,

R. BATES,

Jackson, Aiken, Co.,

South Carolina.

U. S. A.

P. S.—All Propagating Wood for export will be sealed in air tight metallic seals to insure keeping while in transit.

Below I give you exact reproductions of letters which you will note in regard to my products.

UNITED STATES DEPARTMENT OF AGRICULTURE

Bureau of Plant Industry.

Pomological Collections.

Washington, D. C., June 16, 1908.

Mr. R. Bates,

Jackson, S. C.

Dear Sir:—Since writing you last I have given the plums which you sent careful examination, and I find that the Monclet is one of the best plums

of its class that we have yet received at this office. I have kept some of them until now and they are in sound condition and much better in quality I think than when first received. The Bates, I find, is also a very good plum, and has been classed as "good" to "very good." I think you have originated some remarkably good plums of the kind. Why could you not introduce some of the blood of the European plums into your Japan plums? Perhaps you have been experimenting in this line. It should be well worthy of trial. Are you offering trees of your new varieties for sale, or have you distributed them in other sections of the country? If not, I think it would be a good plan for you to send scions to some of the State Experiment Stations in order to have them tested elsewhere than where they originated, so as to ascertain if they are adapted to other parts of the country.

Thanking you for the privilege of examining these new plums, I remain,

Yours very truly,



Pomologist.

UNITED STATES DEPARTMENT OF AGRICULTURE.

Bureau of Plant Industry.

Pomological Collections.

Washington, D. C., June 10, 1908.

Mr. R. Bates.

Jackson, S. C.

Dear Sir:—Yours of recent date, and the box containing specimens of your new plum, Moncelt, which came in good condition. After carefully

examining this fruit, I find it to be one of the best of its kind we have received at this office. It is certainly a very good keeper, and excellent for carriage and transportation. You are doing some excellent work in originating new varieties, and I trust and hope that you may in some way be rewarded for the valuable work along this line. We have had a model of one of the specimens of this fruit, and also plantings and descriptions made for placing on file in this office. I thank you very much for your courtesy in sending us these valuable specimens of your new fruits. We will be very glad to avail ourselves of your kind offer to send other specimens of new fruits.

Hoping to hear from you again, I beg to remain,

Yours very truly,

P. J.

I am sending you a G. B. Braskett
few bulletins also a list for Pomologist.
you to select such as you would like to have
sent to you and enclose frank envelope
for your reply. Check our list and return it and
I will send the bulletins

AGRICULTURAL EXPERIMENT STATION
—of the—
NORTH CAROLINA COLLEGE OF AGRICULTURE
AND MECHANIC ARTS.

C. B. WILLIAMS, Director.

F. C. REIMER, Horticulturist.

West Raleigh, Oct. 6, 1908.

Mr. R. Bates,
Jackson, Aiken County, S. C.

Dear Sir:—

While at the Pomologist's office in Washington, D. C., this past summer, Prof. Erwin showed me some paintings of some sample varieties of new plums which you had produced. We should like very much to get either trees or bud wood from

these varieties for growing at this Station. Will you kindly let me know whether we can obtain either the trees or bud wood and at what price? We are especially anxious to get hold of the Moncelt which Prof. Erwin thought was just a little the finest hybrid plum that he had ever seen. Of course we would be glad to get hold of the other varieties also.

I am very well acquainted with Mr. Bates, of Lake City, Fla., and he told me that he had relatives in that section of S. C.

I will be glad to hear from you at an early date.

Very truly yours,

A. L. Reiner



